

## REFERENCE SIGNAL GENERATORS

### ABSTRACT OF THE DISCLOSURE

Reference signal generators are provided that automatically adjusts a reference signal's amplitude when that signal is delivered into system loads having unknown capacitances. The amplitude is preferably initiated at a maximum amplitude to insure operation of system elements that require the reference signal. It is subsequently adjusted downward to a controlled reference amplitude which is predetermined to be an amplitude sufficient to sustain proper operation of the system elements but sufficiently reduced to minimize the spurious signals typically generated by fast high-level current transitions. In addition, the reduction to the controlled amplitude reduces the system current drain. The level control is realized in a buffer amplifier so that the amplitude level of an oscillator signal can be set independently to maximize its signal-to-noise performance. Accordingly, requirements for the reference amplitude do not compromise requirements for the amplitude level of the oscillator signal.